

ABSTRACT OF THE DISCLOSURE

An optical flow is disclosed having a shell with a first portion and a second portion. The first portion provides a light entry aperture, and the second portion provides an imaging aperture. An inlet tube and an outlet tube are retained between the first portion and the second portion. A viewing assembly is retained
5 between the first portion and the second portion. The viewing assembly includes a reference plate and a flow channel. The flow channel fluidly communicates with the inlet tube and the outlet tube. The reference plate extends from the shell to serve as a repeatable reference point for properly positioning the optical flow cell.